Network Control Center

STDN DAILY REPORT
FOR GMT DAYS
16, 17 AND 18 APRIL, 2001

Part I. Operations

16 APRIL

A. SN Anomalies:

1. HST Support **16/ 1523-1552Z**

SGLT-3 command uplink failed causing loss of TDRSS commanding. Failed over to redundant uplink chain to reestablish commanding. Performed SA2 Null search to re-lock on HST event. Also ISS was impacted for 5 minutes of intermittent K-BAND dropouts resulting in degraded data. HST impacted from 15:28:06-15:29:29 and 15:30:27-15:31:38 and ISS from 15:47:00 to 15:52:00 TTR # 23840

171 SSA2F/R 1527-1545Z 2 Min. 54 Sec. Svc/Data Loss (Non-Recov)

B. ISS Anomalies:

1. ISS Support **16/1523-1552Z**

SGLT-3 command uplink failed causing loss of TDRSS commanding. Failed over to redundant uplink chain to reestablish commanding. Performed SA2 Null search to re-lock on HST event. Also ISS was impacted for 5 minutes of intermittent K-BAND dropouts resulting in degraded data. HST impacted from 15:28:06-15:29:29 and 15:30:27-15:31:38 and ISS from 15:47:00 to 15:52:00 TTR # 23840

171 KSAR1 1507-1558Z 5 Min. Svc/Data Loss (Recov)

C. GN Anomalies:

1. SGS/EO-1 Support 16/1128-1430Z

Recorder number 1 servo card failed prior to EO-1 support. SCC reported “timeout” on recorder number 1. The recorder was impossible to control, reported “Init Failure, 0x3000” Station did some troubleshooting , and found a broken servo card. The servo card was replaced with a spare unit. CDS ID # 18511

11 METER 1136-1150Z LANDSAT-7 Support also affected.

17 APRIL

A. SN Anomalies:

1. C1313MS Support 17/0000-0112Z

BRTS POCC reported anomalous minor frames with different identifiers (AMSJ,DDDJ and Mttu), several dropouts on last two events. Both events were rescheduled on the SA antenna and all remaining MA events for day 107 were change to SSA. After engineering evaluation, the output power on the calibrate source was adjusted and appears to have corrected the problem. TTR # 23841 and 23842 DR # 42916

275 MAF/R 0101-0105Z 3 Min. 30 Sec. Svc Loss
275 MAF/R 0108-0112Z 3 Min. 30 Sec. Svc Loss

B. ISS Anomalies - None.

C. GN Anomalies:

1. SGS/QUIKSCAT Support 17/1928-1940Z

Station reported not receiving any 512kb QUIKSCAT data. There was no lock on the bitsync and we did not see any frames on

our PTP. Everything looked normal at out end. Station is set up automatically to receive data. Operator had to manually set up commanding through GSIP and operator confirmed test command prior to support and commanding during support. CDS ID # 18514

11 METER 12 Min.Svc/Data Loss (Non-Recov)

2. PF-1/LANDSAT-7 Support 17/203715-204514Z

Due to testing of new software during a previous shadow support, the system was not configured properly by the automation software and the operator had to manually configure the bit-sync to lock on the 4k data and the RF switch to enable the command uplink. When the RF switch was enabled for command uplink, the station momentarily lost lock on the X-band data (1 - 2 seconds lost at around 20:45:16) and when X-band lock was restablished, the I and Q channels were swapped. A UTDF file was also not produced as the TDF was not enabled for recording during the support. CDS # 18517

7 Mins 59 Secs of S-band 4K Loss, Recoverable. 1 - 2 sec of X-band Loss, recovery unknown.

3. WGS/IP3 Support 17/1636-1647Z

No downlink from spacecraft, reason for no downlink unknown. Post-pass systems checked nominal. Also tracked with other antenna systems (TOTS & 11M). Same results. CDS # 18524

163632-164637Z 10 Mins 5 Secs Data Loss Unknown if recoverable

18 APRIL

A. SN Anomalies:

1. STGT/TOPEX Support 18/185430-192400Z

No lock at AOS. POCC sent 2 return reacqs, no lock. CSC sent OPM 7, no lock. Further investigation shows that topex was not in view of TDRS spare. TTR # 23843

TDS SSA2 29 Mins 30 Secs Service/Data Loss Recoverable

B. ISS Anomalies: - None.

C. GN Anomalies:

1. AGS/FAST Support 18/0859-0902Z

LEO-T setup for scheduled event, brought up Command Carrier, Terminated Sweep, went to center frequency then halted and lost connection with the Solar Microsystems Computer. The support was moved to TOTS-1 at 09:01:25z. The Project's data connection was established from TOTS at 09:02:00z. Command Carrier (from TOTS) was up at 09:03:16z, and sweep was enabled, Go for Command was at 09:04:27Z. The Leo-T system was "Cold Booted" to clear the fault, resetting equipment settings, and to re-establish the Master Controler connection. Only 00:01:22 seconds of realtime data was lost, all Post Pass data was sent from TOTS using the taped Back Up data.
CDS ID# 18515

LEOT-T 1 Min. 22 Secs.Service/Data Loss Recoverable

2. AGS/FAST Support 18/1112-1141Z

Antenna was stuck in EL limits. Entire support switched to TOTS-1 with no impact. Antenna was manually removed from limits, then commanded to several different positions and placed in stow position/standby after testing. See also IDR 00018515. This may have been the cause of that problem. CDS ID# 18516

LEO-T 29 Mins. Service Loss

3. WGS/IP3 Support **18/163545-144522Z**

No downlink from spacecraft, reason for no downlink unknown. Post-pass systems checked nominal. These are the same results as yesterday. This was the first support of the day. The second support was nominal and spacecraft appears to be back on. CDS # 18525

9 Mins 37 Secs Data Loss Unknown if recoverable

Part II . Testing Anomalies

A. SN Test:

1. NAB K-Band Integration Test 17/1640-2100Z NCC/NISN/STGT, National Association Broadcaster Engineers

OBJECTIVES:
A. Evaluate the capability of the NAB forward link equipment to receive TDRS pure carrier on the Ku Band forward link.
B. Evaluate the capability of the NAB transmitter equipment at STGT to transmit NAB telemetry data on the Ku Band Return link at the Intermediate Frequency (IF) level.

RESULTS: OBJECTIVE PARTIALLY MET.

REMARKS:
National Association of Broadcasters (NAB) engineers at RFSOC installed a new modem for the forward link; it is working. The engineers also attempted to work with the return link modem. Good digital content was being outputted from the return link modem, however, it will not work in its current configuration. A new modem is being delivered to STGT. Testing continues on April 18, 2001.

B. GN Test: - None.

Part III. Equipment Status Changes - None.

$ = Changed ETRO
** = New Items

Part IV. Scheduled Activities:

Ultra Long Duration Balloon Engineering Test	19/1230-2000Z
AGS/SGS/WGS/TERRA GSIP Parallel Operations	19/1423-1435Z
AQUA MRTT PF-1 X-Band Telemetry ETE Test	19/1500-1800Z
TILT RF TDRS-1 Checkout	19/1530-29/2330Z
Engineering Test w/JASON-1 POCC, WFF & PKRR	19/1615-1800Z
TITAN-IV/B34 P-3 TARMAC Test	19/1645-1850Z
NAB K-Band Integration Test	19/1702-2057Z

Part V. Launch Forecast Changes - None.